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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,574	11/01/2000	Stephane H. Maes	YOR9-2000-0154US1	2969
7590	10/15/2004		EXAMINER LIN, WEN TAI	
F Chau & Associates LLP 1900 Hempstead Tpke Suite 501 East Meadow, NY 11554			ART UNIT 2154	PAPER NUMBER

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,574

Applicant(s)

MAES, STEPHANE H.

Examiner

Wen-Tai Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-32 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the claims are directed toward a communication stack per se, which is a collection of software programs or routines for handling communications and can be written on a piece of paper. Such claimed communication stack does not define any structure and functional interrelationships between the program stack and the computer software and hardware components which permit the program stack's functionalities to be realized (see MPEM §2106).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 15-16, 20-25 and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al.(hereafter "Burke")[U.S. Pat. No. 6233235] in view of Crupi et al. (hereafter "Crui") [U.S. Pat. No. 6195636].

6. As to claim 1, Burke teaches a communication stack [Fig.6], comprising:

- a first layer for generating encoded audio data [e.g., col.7, lines 47-52];
- a second layer for generating a data stream comprising the encoded audio data [e.g., 124, Fig.6, i.e., the RTP];
- a third layer for generating a transmission control data stream [118, Fig.6], wherein the transmission control data stream comprises meta information for coding scheme notifications [col.7, lines 41-43, wherein the coding scheme must also be included in the packet otherwise the receiver would not be able to decode the data]; and
- a fourth layer for transporting each of the data streams [126, Fig.6].

Burke does not specifically teach that the audio data comprises compressed feature vectors representative of speech. However, it is well known in the art to have a set of compressed speech reconstructed in accordance with the original personal tone. For this purpose, Crupi teaches that by sending the sender's voice feature data along

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with the compressed audio data, the sender's personal voice can be reconstructed at the receiving end [See Fig.3].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate compressed feature vectors in Burke's audio data because they are needed for reconstructing of the speaker's voice.

7. As to claim 2, Burke further teaches that that the first layer is adapted to reconstruct an audio waveform from encoded audio data [i.e., for symmetry, the original audio waveform would naturally be reconstructed at the first layer at the receiver's communication stack].

8. As to claim 3, Burke further teaches that that the first layer comprises one of a plurality of encoding schemes and the encoded audio data generated by the first layer comprises one of a plurality of corresponding encoding types [col.7, lines 47-49; e.g., choosing one out of G.711, G.723 or G.729 encoding schemes, the result of each corresponding to a associated encoding type].

9. As to claim 15, Burke further teaches that the second layer employs an extension of RTP (real time protocol) to wrap the encoded audio data file [e.g., 124, Fig.6, i.e., the RTP; note that the RTP protocol allows extension of its headers with additional fields for designating meta information as appropriate].

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10. As to claim 16, Burke further teaches that the third layer employs an extension of RTCP (real time control protocol) to wrap the transmission control data [118, Fig.6].

11. As to claim 20, Burke further teaches that the communication stack is implemented in a Voice over IP network [col.7, lines 30-45].

12. As to claim 21, Burke further teaches that the fourth layer comprises one of UDP (user datagram protocol), TCP (transmission control protocol), and both [126, Fig.6].

13. As to claim 22, Burke further teaches that the communication stack is tangibly embodied as program instructions on a program storage device [i.e., due to the fact that a communication can be implemented as in a piece of software, the feature of this claim is obvious].

14. As to claims 23-25 and 28-32, since the features of these claims can also be found in claims 1, 15, 20 and 22, they are rejected for the same reasons set forth in the rejection of claims 1, 15, 20 and 22 above.

15. Claims 4-14, 17-19 and 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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16. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (703)305-4875. The examiner can normally be reached on Monday-Friday(8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:


(703)872-9306 for official communications; and

(703)746-5516 for status inquires draft communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Wen-Tai Lin

October 13, 2004


10/13/04